



**Hearing Health:
Boothless Technology**

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This briefing is UNCLASSIFIED *"Medically Ready Force...Ready Medical Force"* 1


Disclosure



The views expressed in this presentation are those of the author(s) and do not reflect the official policy or position of the Department of Veterans Affairs, Department of Defense, or the U. S. Government.

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Agenda



- Background
- Overview of requirements, benefits, and uses
- Overview of products
 - AMTAS
 - Create
 - Emoyo KUDUwave
 - OtoID
 - Shoebox
- Product demonstrations

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Background



- Hazardous noise is prevalent in today's world, especially in the military
- Using boothless technology, quality hearing tests can be completed without the use of a sound booth and trained healthcare personnel
- Boothless technology can bring the point of care for hearing injuries at work site, saving valuable time and resources
- Hearing injuries need to be assessed quickly and as far forward on the battlefield as possible

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4

Background



- Reduce costs of for hearing conservation programs
- Provide efficient and cost effective onsite service to noise exposed workers
- Increase capability for education and collection of employee surveys
- Improve throughput capability

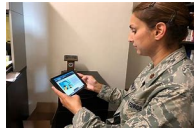


Figure 1. Airmen using tablet. Source: Bari, 2018

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5

Background




- Allows the Service member to obtain care in operational environments closer to the point of injury
 - Reduces the need for evacuation outside theater for evaluation
 - Offers more timely evaluation and treatment leading to improved outcomes and rapid return to duty
- Facilitates assessment and treatment in non-traditional settings
- Decreases the need for risky evacuations to higher echelons of care across theaters of combat
- Improves quality of on-site hearing healthcare resulting in improved prognosis, outcome and morale

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6


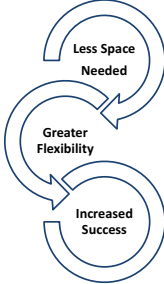
Requirements



- Lightweight/Portable Equipment
- Stand-Alone Capability
- Meets ANSI Standards
- Operated by Non-Hearing Professional
- Conduct Screening and Diagnostics


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Benefits

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Other Uses



Kiosk

- Placement in waiting areas, pharmacy, community outreach events
- Self-administered test
- Obtain additional hearing health information using questionnaires





Fig 1. Android tablet Kiosk. Source: iFitkiosk.com

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DHA
Defense Health Agency

Other Uses



Tablet

- Integrate into health and wellness exams
- Speech and pure tone testing to assess functional hearing ability
- Provide hearing health education

Figure 1. Tablet. Source: GPO/AFSS

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Overview of Products







- AMTAS
- Creare
- Emoyo KUDUwave
- OtoID
- Shoebox

UNCLASSIFIED 11

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Summary

Effective Boothless Hearing Technology will:

					
INCREASE ACCESS TO HEALTH CARE	INCREASE OVERALL AWARENESS AND IMPORTANCE OF GOOD HEARING HEALTH	EARLIER TREATMENT AND REHABILITATION FOR ADULTS WITH MILDER HEARING IMPAIRMENTS	INCREASE KNOWLEDGE AND INFLUENCE BEHAVIOR CHANGE TO REDUCE HEARING LOSS	REDUCE CO-MORBID CONDITIONS RELATED TO HEARING LOSS	EFFECTIVE HEARING HEALTH SERVICES WILL RESULT IN AN INCREASED QUALITY OF LIFE

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Online Resources



- Hearing Center of Excellence
 - <https://hearing.health.mil>
- CAOHC website
 - <http://www.CAOHC.org>
- NHCA website
 - <https://www.HearingConservation.org>
- NIOSH website
 - <https://www.cdc.gov/niosh/topics/noise/default.html>

UNCLASSIFIED 13

Questions/Discussion



UNCLASSIFIED 14
